

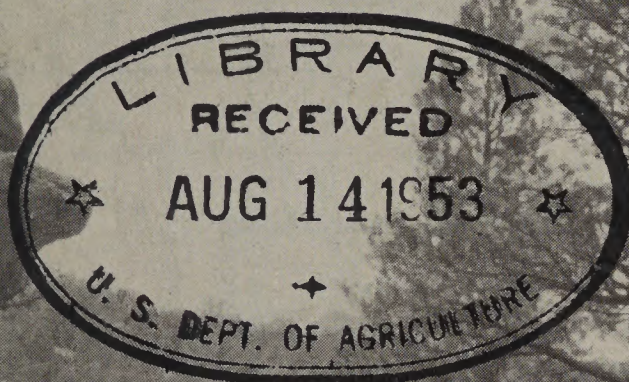
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KAIBAB
NATIONAL FOREST

ARIZONA

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On One of the Motor Ways

F-223867

UNITED STATES
DEPARTMENT OF AGRICULTURE

2 U.S. FOREST SERVICE, 2a form.

NATIONAL FORESTS

The national forests are created and administered as sources of a perpetual supply of timber for homes and industries and to prevent the destruction of forest cover which regulates the flow of streams. The timber, water, forage, mineral, wild life, recreational and other natural resources of the national forests are for the use and enjoyment of all the people. The national forests, often confused with national parks, are administered by the Forest Service, United States Department of Agriculture. National parks, on the other hand are administered by the National Park Service, United States Department of the Interior and for a different purpose.

THE

KAIBAB NATIONAL FOREST

GEOGRAPHY

The Kaibab National Forest lies wholly within the State of Arizona. It includes the Kaibab Mountain and also the tops of the Trumbull Mountains, a total of 723,411 acres.

The Kaibab Mountain varies in altitude from 5,000 to 9,200 feet. Mount Trumbull, to the west, is approximately 8,000 feet high. The Trumbull Mountains are a separate division of the Kaibab National Forest, known as the Mount Trumbull Division, with an area of 17,640 acres.

The Kaibab Plateau is peculiar in that it resembles a peninsula, extending out from the highlands of Utah into the lower lands of Arizona. Surrounding it are lower areas of semidesert country. Moisture coming up out of the Grand Canyon with southerly winds is precipitated as rain when it strikes the high plateau country, and the Kaibab therefore has many summer showers. This explains the abundant growth of timber over the mountain.

Another peculiar thing about the Kaibab is that it has no running streams. Although winter snows are from 3 to 8 feet deep, and summer rains are frequent, there is no run-off. The top rock

formation is porous limestone. Water percolates through this rock formation and finally rushes out into the Grand Canyon. Such springs as Roaring Springs, Thunder River, and others, are good-sized streams when first coming out of the mountain side. On the mountain top are many sink holes where small rivulets from rains will run down into the ground. When the openings in these sink holes become clogged, small lakes are formed. All Kaibab lakes were formed by such sink holes, and any natural pond of water is termed a lake.



A Camping Spot at Big Saddle

F-240990

HISTORY

The Kaibab National Forest was first created by proclamation of President Benjamin Harrison on February 20, 1893, under the name of Grand Canyon Forest Reserve. It then included Kaibab Mountain, Grand Canyon, and an area on the South Rim. President Theodore Roosevelt created the Grand Canyon National Game Preserve on November 28, 1906, which included this entire area, with the exception of the Mount Trumbull division.

On July 2, 1908, by proclamation of President Theodore Roosevelt, the name of the forest was changed to Kaibab National Forest and the southern boundary fixed at the Colorado River. The area south of the river was placed in the Tusayan National Forest. In 1919 the Grand Canyon Na-

tional Park was created which included both sides of the Colorado River, and parts of the timberland on the plateau.

The name "Kaibab" is of Indian origin and means "mountain lying down," or a "high flat mountain." The area has for years been the home of a herd of mule deer, and because of the great numbers of deer hides taken off in early years, it was known as "Buckskin Mountain."



A Bunch of Bucks on Summer Range

RESOURCES

TIMBER

The timber species on Kaibab Mountain are western yellow pine, blue spruce, Engelmann spruce, Douglas fir, white fir, Alpine fir, quaking aspen, piñon pine, and juniper. There is estimated to be about one and one-half billion feet, board measure, of timber over 12 inches in diameter. The Mount Trumbull area contains 15 million feet of western yellow pine timber.

Two small sawmills on Kaibab Mountain and one on Mount Trumbull are cutting for local de-

mands only. Kaibab timber is, as a rule, a relatively young stand. Old timber is scattered through it but deterioration has not begun to any great extent.

From 1920 to 1925 there was a serious outbreak of bark beetles that killed more than 150 million feet of timber. The infestation has subsided now after extensive control measures carried out by the Forest Service, in which some 15 million feet was cut and \$60,000 expended. Natural conditions also undoubtedly contributed toward this subsidence. The old trees attract these beetles and under certain favorable conditions they increase rapidly. They can then kill old and young trees alike in mass attack and are as disastrous as forest fires. Vigorous young trees are able to withstand incipient attacks because of their vitality and vigor.

There will come a time when the timber of the Kaibab will be needed to fill in the diminishing supply for industries. To be ready to meet this demand when it comes, the Forest Service has a plan for management of the timbered area so that the old trees will be cut and the vigorous young trees left to grow. All interests will be carefully considered and cutting will be so done that the beauty of the trails, drives, and camp grounds will be preserved. By taking out the old trees the Forest Service will eliminate the breeding grounds of bark beetles, make more room for younger trees, and thereby keep the whole area perpetually green and beautiful.

GRAZING

Grazing of domestic stock has been so reduced in past years that there are now only 1,800 cattle and 2,405 sheep on the Kaibab National Forest. These are mostly on the north end and east side where there are not many deer. These cattle and sheep are owned by 36 residents of nearby communities who are dependent upon their livestock for a livelihood.

The feeding habits of domestic stock and deer are somewhat different. Deer are browsers and eat very little grass; domestic stock are grass eaters. There is therefore room on the game preserve for a reasonable number of domestic stock.



Badly Damaged Winter Range

F-237199

RECREATION

The Kaibab Forest is open to automobile travel from about May 15 to November 15. The highway to the Grand Canyon extends through it. United States Highway 89 extends as far south as the Jacob Lake camp grounds, then continues on to the new bridge across the Colorado River.

Camping is free anywhere in the forest. At certain places some camping conveniences have been provided.

JACOB LAKE CAMP

Elevation, 7,800 feet

This camp is in the heart of the Kaibab squirrel country, in a beautiful grove of western yellow



Jacob Lake Camp. A Free Public Camp Ground

F-240978

piners. Jacob Lake is near it but can not be seen from the highway. This camp is located at the junction of Highway 89 with the Grand Canyon Highway. Travelers from the north turn here to go to the new bridge across the Colorado River and to Flagstaff.

Cold drinks and lunches are served here. Gasoline, groceries, and cabins are available.

VT RANCH

Elevation, 8,800 feet

Years ago when large herds of cattle were grazed on the mountain, the VT Ranch was the headquarters summer ranch of a cattle company. Here were the corrals, spring, and ranch house. These buildings have fallen down and have been moved away but the spot still retains the name of VT Ranch. VT was the cattle brand used by the ranch.



Kaibab Lodge at VT Ranch

Kaibab Lodge is a summer hotel at the VT Ranch, with central dining room, lodge room, and cabin sleeping rooms. From the steps of this lodge, large numbers of deer feeding in the open valley may be seen every evening. Campers' cabins are also available.

Hades Store.—Gasoline, groceries, fresh milk, and fresh bread may be purchased here. There are also horses for rent, and automobile service.

Camp Ground.—A free camp ground among aspen and spruce trees is maintained by the Forest Service.

Airport.—In summer daily airplane trips are made across the Grand Canyon. However, because of the uneven surface and undeveloped condition of the field at VT Ranch, pilots should not land here unless they are familiar with the ground. There is a good year-round landing field at Fredonia.

BIG SPRINGS CAMP

Elevation, 6,700 feet

This is a small camp ground where the cool waters from Big Springs come tumbling down the mountain side.

A Forest Ranger station is at this point, and also the pens and fields where deer are trapped in the fall.

WILD LIFE

DEER

The Kaibab National Forest is noted for its large herd of mule deer and before the creation of the National Game Preserve was a famous Indian hunting ground. At the time of the creation of the game preserve in 1906, the herd was estimated to be 3,000 head. After that, by protec-



Feeding Fawns on the Kaibab

tion from hunters, and the elimination of a large number of predatory animals, the herd increased to a number that in 1924 was estimated by various people to be from 15,000 to 100,000. The Forest Service estimate was 30,000, but this was very conservative. The herd reached the peak in numbers in 1924 and the question of food supply became

serious. There were so many of them that all the annual growth of the browse plants was eaten every year, and a little more besides. Range plants could not long survive with this browsing and a large number of the plants died. Winter starvation has been heavy following dry years. Reduction measures, such as trapping and shipping live deer to other ranges and supervised hunting, have been tried. In February, 1930, a range count was made by the Forest Service and the Game Department of the State of Arizona, and an estimate of the total number of deer placed at 30,000. The annual increase of a herd of 30,000 deer will be at least 10,000.

The deer do not drift away from this area in any appreciable numbers and driving them is impossible, so it becomes necessary to initiate and carry out a management plan whereby the deer will be kept to a number which the available food supply will support. A game management plan has been worked out by the Arizona Game and Fish Commission and the Forest Service, in cooperation.

The big objective of such a game management plan is to maintain as large a herd of deer as the food supply will support in good healthy condition. To do this it is necessary to keep a balance between the number of deer and the food supply. The following are the principal items of the plan:

Preserve the deer on the meadows on the high range as a summer attraction, and allow as little disturbance there as possible.

Have examinations made of the area every year by plant experts to determine the condition of forage plants—whether overbrowsed or properly utilized, and whether such plants are recuperating, stationary, or dying out.

Get each year as accurate an estimate as possible of the number of old deer, and also of the increase.

Remove the surplus by trapping live deer and transporting them to other ranges; catching and raising fawns on cow's milk until October, and then shipping them to private and public parks;

regulating hunting, under close supervision of forest rangers and deputy game wardens.



Deer Trapped for Reproduction

MOUNTAIN LIONS

There are a number of mountain lions on the Kaibab which furnish a lot of thrills in the hunting. Hunting of mountain lions by sportsmen is keeping these animals in proper check. The Kaibab, including the rims of the Grand Canyon and Kanab Wash, has always been a famous lion hunt-



Mountain Lion—At Bay and on Display

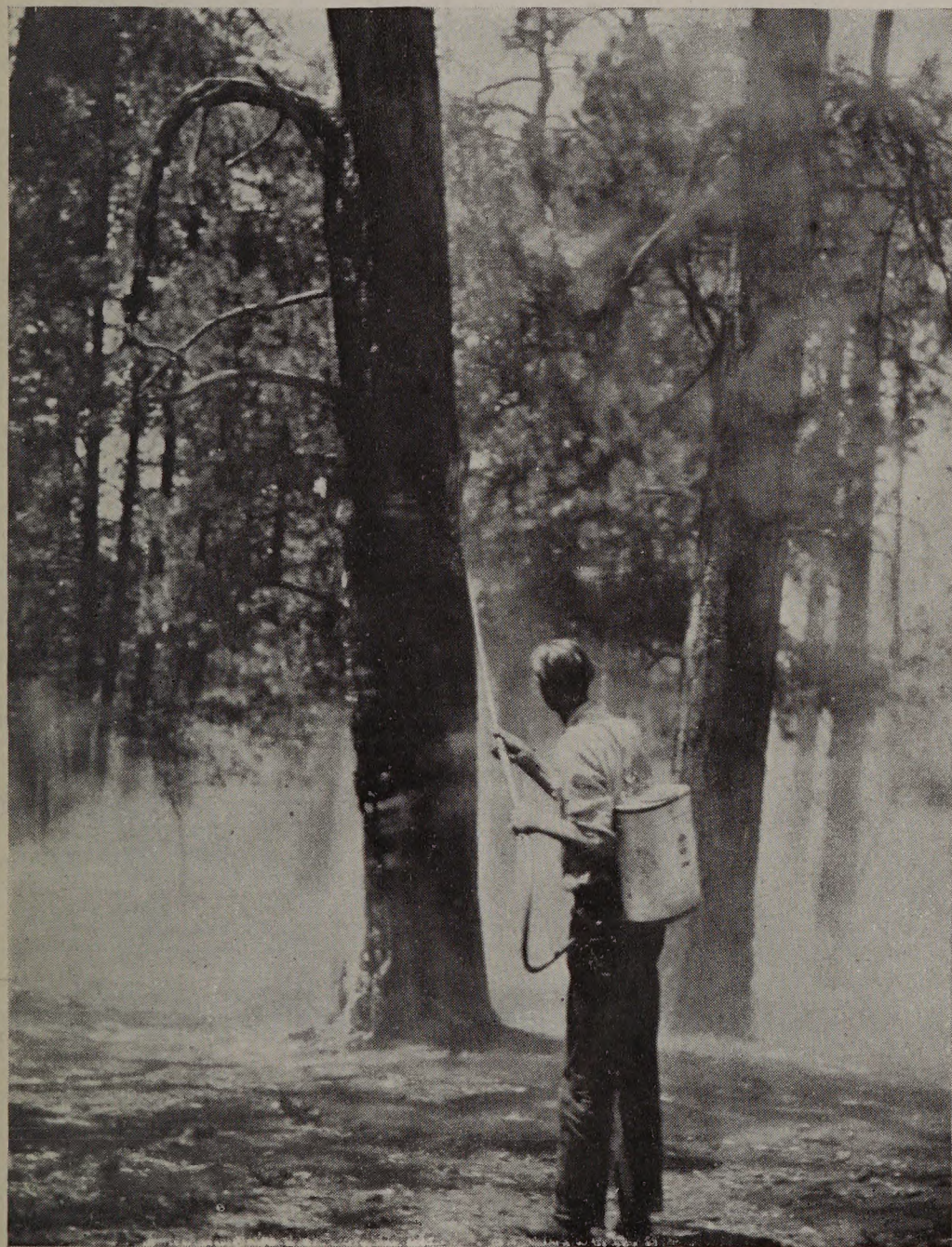
ing ground. Uncle Jim Owens and Theodore Roosevelt hunted together here a number of years ago. There are now two packs of lion dogs, whose owners make a specialty of taking parties on lion hunting trips. These owners are prepared to furnish horses, camp equipment, guides, and dogs.



Lion Hunter's Camp

KAIBAB SQUIRREL

The Kaibab squirrel is found only on the Kaibab National Forest and the North Rim of the Grand Canyon. It is a large squirrel with a white plummy tail and sometimes tufted ears. It



Forest Fire—Using Water in the Final Clean-Up

F-237222

does not hibernate in winter, but lives on the bark of western yellow pine. It is found only among western yellow pine trees. It is timid and when seen is almost always trying to get out of sight.

FIRE

From 15 to 30 forest fires break out on the Kaibab National Forest each year. These are caused mostly by lightning. A few fires are of human origin, caused principally by smokers throwing cigarette stubs into the dry needles.

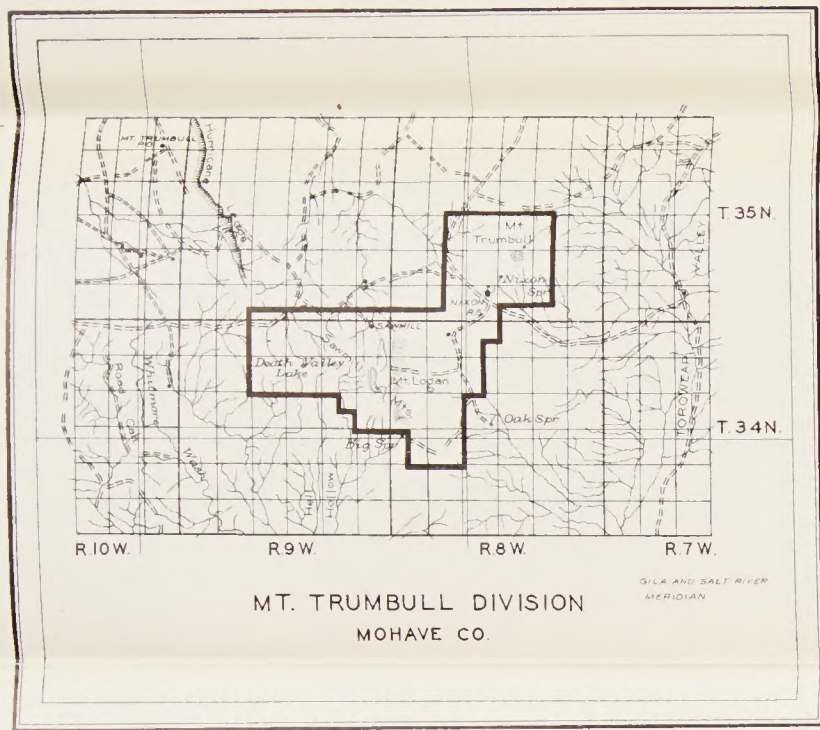
There are lookout towers at Big Springs, Dry Park, and Jacob Lake. In addition to these, trees are selected for good views on all the roads and motor ways and are being developed by building ladders on them so the lookout men may climb to the tops.

Motor ways have been developed on nearly all of the different ridges, and in the fire patrol system horses have been eliminated and motors are used exclusively.



Big Saddle Camp

F-240991



U. S. DEPARTMENT OF AGRICULTURE
FOREST SERVICE
R. Y. STUART, FORESTER
T. W. MORGENTHAU, CHIEF ENGINEER

KAIBAB NATIONAL FOREST ARIZONA GILA AND SALT RIVER MERIDIAN 1930

Scale 0 1 2 3 4 Miles

- LEGEND
- National Forest Boundary
 - Adjacent National Forest Boundary
 - Main motor highway
 - Good motor road
 - Poor motor road
 - Road not passable to motors
 - Trail
 - Telephone line
 - Supervisor's headquarters
 - Ranger station
 - Permanent lookout station
 - Triangulation station
 - House, cabin, or other building
 - U.S. Highway Numbers



SIX RULES FOR PREVENTION OF FIRES IN THE MOUNTAINS

1. **Matches.**—Be sure your match is out. Break it in two before you throw it away.
2. **Tobacco.**—Throw pipe ashes and cigar or cigarette stumps in the dust of the road and stamp or pinch out the fire before leaving them. Don't throw them into brush, leaves, or needles.
3. **Making Camp.**—Build a small camp fire. Build it in the open, not against a tree or log or near brush. Scrape away the trash to a distance of several feet all around the fire.
4. **Leaving Camp.**—Never leave a camp fire, even for a short time, without quenching it with water and earth.
5. **Bonfires.**—Never build bonfires in windy weather or where there is the slightest danger of their escaping from control. Don't make them larger than you need.
6. **Fighting Fires.**—If you find a fire, try to put it out. If you can't, get word of it to the nearest U. S. forest ranger or State fire warden at once. Keep in touch with the rangers.

Location of Forest Officers

Forest Supervisor, Kanab, Utah.

Forest Rangers at Big Springs, Dry Park, VT Ranch,
and Jacob Lake.

All may be reached by telephone.